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Docket No.: R2184.0076/P076-A
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Naruhiko Masui

Application No.: 10/720,230

Confirmation No.: 4347

Filed: November 25, 2003

Art Unit: 2627

For: INFORMATION RECORDING METHOD
AND APPARATUS

Examiner: K. K. Chu

REQUEST FOR RECONSIDERATION

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action dated January 10, 2007, Applicant requests reconsideration in view of the following remarks.

Claims 14, 15 and 17 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,901,123 to Taniguchi et al. ("Taniguchi"). The rejection is respectfully traversed.

Claim 14 recites "first sync information generating means for generating first codes that represent first sync patterns for a portion of the sync frames such that each first sync pattern is formed as a space on the recording medium; second sync information generating means for generating second codes that represent second sync

patterns for the remainder of the sync frames such that each second sync pattern is formed as a mark on the recording medium so as to meet a low-frequency reduction scheme; sync information selecting means for selecting one of the first codes generated by the first sync information generating means and the second codes generated by the second sync information generating means,” and “data encoding means for generating modulation codes based on the sync frames in which the codes selected by the sync information selecting means are inserted.” Accordingly, the first and second codes are generated to meet “a low-frequency reduction scheme” and form part of the basis for the modulated codes generated by the data encoding means. Taniguchi does not disclose these limitations.

The Office Action identifies the “pre-information 4” element of Taniguchi as meeting the codes of the claimed invention. As described in Taniguchi, however, the pre-information actually corresponds to information stored in the pre-pits 4, which are “formed in advance before the DVD-R 1 is shipped.” Col. 9, lines 45-46. The pre-information is “obtained, in advance of actually recording the record information, by detecting [the] pre-pit[s] 4 by an information recording apparatus.” Col. 9, lines 57-60.

Taniguchi differentiates between two types of pre-information, that is, *synchronization* pre-information and *data* pre-information. Presumably, the Office Action is asserting the synchronization pre-information of Taniguchi discloses the codes which “represent sync patterns” of the present invention claim 14. While Taniguchi describes two types of synchronization pre-information patterns (EVEN SYNC pre-information and ODD SYNC pre-information), Taniguchi only describes these patterns as used to identify whether a particular frame is classified as an even or odd frame. See Col. 10, lines 38-46: “It is possible to read out these patterns at a time for recording the later described record information to thereby judge whether the pre-

information is recorded on the EVEN frame or the ODD frame.” Regarding the creation of the frames, Taniguchi describes generating recurring alternating odd (S_o) and even (S_e) frame signals. See Taniguchi Fig. 6a, Col 13, lines 34-48: “This pulse of the ODD frame signal S_O is continuously generated by measuring a time corresponding to $2976T (=1488Tx2)$ from the time of the first synchronization frame, by the ODD frame counter 50, and by repeating the generation of the pulse with the length of $2T$ by the decoder 52, each time the above mentioned time elapses.” The same is true for the EVEN signal. See Col. 13, lines 52-58. Thus, Taniguchi only describes generating alternating even and odd sync pre-information.

Therefore, the codes of the present invention have at least two characteristics not disclosed by the sync pre-information of Taniguchi. First, the codes are not contained within the pre-pits, as the sync pre-information is in Taniguchi. Instead, as claimed, data encoding means generates “modulation codes based on the sync frames in which the codes selected by the sync information selecting means are inserted.” According to the claim, these codes are modulated according to a “modulation scheme,” and the modulated code converted into a series of pulses “through a predetermined conversion scheme.”

Second, the codes which represent sync patterns are not merely alternating odd and even as the sync pre-information of Taniguchi. Instead, the codes are generated “so as to meet a low-frequency reduction scheme” as claimed. Please refer to the example described in the specification, where “[b]ased on the absolute value of the DSV, the determination concerning the reduction of the low-frequency components is performed. One of the pattern 1 and the pattern 2 is selected for each sync frame according to the result of the determination.” See ¶61. According to one aspect of the invention, “[i]n a case in which a certain amount of the low-frequency components may

be accepted, arbitrary selection of one of the pattern 1 or the pattern 2 for each sync frame is possible." See specification ¶64.

Taniguchi does not teach, suggest or describe the above described important features. Applicant therefore submits that claim 14 is allowable over Taniguchi. Claim 15 depends from claim 14 and is allowable over Taniguchi for at least the reasons provided above. Claim 17 contains similar limitations and is allowable over Taniguchi as well. Accordingly, Applicant respectfully requests the rejection be withdrawn.

In view of the above remarks, applicant believes the pending application is in condition for allowance.

Dated: March 30, 2007

Respectfully submitted,

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